MODIS Technical Team Meeting
Thursday, October 26, 2000
3:00-4:00 PM

Vince Salomonson chaired the meeting. Present were Harry Montgomery, Eric Vermote, Ed Masuoka, Bob Murphy, Skip Reber, Wayne Esaias, Steve Kempler, Bruce Guenther, Chris Justice, and Mark Domen, with David Herring and Rebecca Lindsey taking the minutes.

1.0 Schedule of Upcoming events

· PORSEC 2000 Goa, India	December 5-8
· AGU Fall Meeting San Francisco, CA	December 15-19
· Land Validation Meeting At or near Goddard	January 22-23, 2001
· Atmosphere Group Meeting GSFC (Bldg. 33, H114)	January 23, 2001
· MODIS Science Team Meeting At or near Goddard	January 24 - 26, 2001
· EOS Investigator Working Group meeting Ft. Lauderdale, Florida	January 30 - February 1, 2001

2.0 Meeting Summary

2.1 Instrument Update

Murphy reported that the Terra spacecraft data formatter had gone down, and that no Terra data were being transmitted to ground stations. The failure may be a single event upset, but there is no additional information at this time. This formatter failure has caused the direct broadcast of data to stop as well. While the formatter is redundant, they will not switch to the back up until they have determined that doing so will not produce a similar failure. (Post-meeting note: The spacecraft formatter was restarted in the morning of October 27 without any problems.)

At the October 13 meeting, Al Fleig raised an issue about the Aqua scan mirror and a potentially incorrect parameter that might cause misalignment, or overlapping, of scan lines. Montgomery reported that MCST had taken data from Aqua ground tests, and calculated the maximum misalignment to be 6 arc seconds. For Terra MODIS, this value

was 2 arc seconds, or approximately 13m on the ground. These preliminary calculations suggest that there is not a problem with the alignment of the Aqua MODIS scan mirror.

2.2 GDAAC Update

Kempler reported that the GDAAC has completed processing data week 273-280 and were two days short of completing data week 281-288. In addition, they have finished processing an MCST special request. In the last week, the GDAAC archived 94 GB of data and distributed 135 GB.

There was a discussion of the various web interfaces for searching and ordering MODIS data, specifically the EOS Data Gateway (EDG) and the Goddard DAAC's "MODIS No-Frills Data Access." The EDG is the only way to search and order all products currently available through the DAACs. The "MODIS No-Frills Data Access," while it is not up to date with all available products, does have some advantages over the EDG, such as an interactive calendar showing available data dates and granule coverage per day.

The consensus was that the EOS Data Gateway (EDG) is the official way to obtain data from the DAACs, and that we will promote it as the best way to get MODIS data. Salomonson suggested that Reber might approach Vanessa Griffin with the suggestion that EDG should provide the "No-frills" functions, or that we could consider supporting the "No-frills" interface such that it could be maintained and updated in a timely manner.

Kempler's position was that the "MODIS No-Frills" would be an in-house system that will be kept current with their best efforts. The site will have a disclaimer redirecting users to the EDG if their searches are unsuccessful with "No-Frills."

2.3 SDST Update

Masuoka presented a chart (Attachment 1) showing the status of the "Golden PGEs." PGE02 and PGE03 are being integrated successfully at the GDAAC. There is a problem with the data server and PGE01, but a patch is going in to fix that. Also, they are still waiting for some ESDT changes from ECS. Almost all PGEs are in operations in MODAPS. The only PGEs still in development are 09 and 10, which are awaiting a science change in space binning that will reduce sun glint pixels. If these PGEs don't come in by the deadline, we will proceed with the Golden Month without them.

There was a discussion of the effect on the look-up tables of going to Terra B-side electronics. (Post-meeting note: Transition to B-side took place on the morning of October 30.) Masuoka commented that MCST's proposed changes to the focal plane bias configuration will also require new look up tables, which will take 2-3 weeks. Guenther reported that the hope was that the lag in processing at the GDAAC (they are about two weeks behind real time) will afford MCST the opportunity to provide the new look-up tables before they are needed for Golden Month processing.

Masuoka reported that public release of Level 2G Land products has been delayed due to missing ESDTs. Ocean Level 3 product release has also been pushed back one week at MODAPS' request.

Salomonson wondered when he could say that all products would be available. Masuoka said everything but MOD12 (Land Cover and Land Cover Change), MOD 42 (Sea Ice Cover) and MOD44 (Vegetation Cover Conversion) should be ready by the end of the year.

2.4 NOAA/NESDIS

Broder reported that there was no new information since last week on the issue of data delivery problems to the NOAA/NESDIS server.

2.5 Land Update

Vermote reported that they had put the aerosol correction into operations. The group was pleased with this, as it is the first time such a global correction has been applied to land data.

Justice reported that he has asked the land team for input on what they would like to present at the upcoming EOS IWG Meeting. He and Steve Running will pull all the ideas together and decide how to proceed.

Salomonson indicated he would be having a meeting with Jack Kaye and Woody Turner to represent MODIS in the discussion of the president's proposed Millennium Assessment of ecosystem health. Since a global 250-m land surface reflectance image will likely be called for, he invited someone from Land to attend the meeting.

2.6 Oceans Update

Esaias reported that the PI Processing group has been discussing the issue of prototyping reprocessing, and they are developing a strategy on how best to use all our resources to undertake the task.

2.7 MCST Update

Guenther gave a presentation on MCST's recommendation to implement the new 79/110 Itwk/Vdet focal plane bias configuration. (The complete PowerPoint presentation will be available in MODARCH in upcoming weeks.) The new configuration offers several improvements over the operational configuration:

- It reduces the number of dead detectors from six to zero.
- It reduces the number of noisy detectors from two to one (not counting detectors that became noisy after the radiative cooler outgas).
- It minimizes electronic cross talk in SWIR and MWIR bands.

In addition, the subframe differences between the SRCA and SD remain at about 0.5%.

Guenther cautioned that while the new configuration clearly minimizes the instrument's electronic cross talk problems, MCST does not currently understand the implications of the configurations in a quantifiable way. Changing to this configuration does not imply the presence of a correction algorithm.

MCST's recommendation was accepted. (Post-meeting note: The new configuration was implemented on the afternoon of October 31.)

3.0 Action Items Carried Forward

1. Salomonson: Work with Yoram Kaufman and Skip Reber to produce some metrics from the science community to describe the status of data processing as accurately as possible.

Status: Ongoing.

2. MODIS Science Team: Send updates on MODIS metadata terms/valids to Skip Reber (reber@skip.gsfc.nasa.gov). These are terms that enable users to search MODIS data. This is part of a request to the Terra Instrument teams to update metadata terms.

Status: Ongoing. Group needs Reber to clarify, reiterate the request.

3. Masuoka: Represent MODIS concerns on data throughput to EDOS.

Status: Ongoing. The Review Committee is now preparing a report articulating the impacts to the community.

4. Kempler to provide a hardware upgrade schedule, including direction on processing power.

Status: Ongoing.

5. Need discussion between SDST and NOAA on completeness of data and process by which we can get more rapid turn around on snow cover and also perhaps sea surface temperature.

Status: Ongoing.

6. Murphy asked disciplines leads to provide final updates to product release table.

Status: Ongoing.

7. Discipline leads to meet to resolve the issue of beta release code and science-quality code, and what we need to say about it.

Status: Ongoing.